

WHAT IS CLAIMED IS:

Claims 1 - 286 (Canceled)

Claim 287. (Previously Presented) A heterodimeric dye composition, said composition comprising a first dye that comprises a phenanthridinium moiety; and a second dye that is different from said first dye, said second dye being attached through the phenyl ring of said phenanthridium moiety.

Claim 288. (Currently Amended) The \underline{A} heterodimeric dye composition of claim 287, having the structure

wherein said second dye Second Dye is not a phenanthridinium moiety.

Claim 289. (Previously Presented) The heterodimeric dye composition of claim 288, wherein said Second Dye is substituted in any of the *ortho*, *meta* or *para* positions of the phenyl ring.

Claim 290. (Previously Presented) The heterodimeric dye composition of claim 289, wherein said Second Dye is substituted in the *meta* position of the phenyl ring.

Claim 291. (Currently Amended) The <u>heterodimeric dye</u> composition of claims 289 or 290 <u>288</u>, wherein said second dye comprises a thiazole, a fluorescein, a thiazole derivative, or a fluorescein derivative.

Claim 292. (New) The heterodimeric dye composition of claim 288, wherein said Second Dye is attached to said structure through a rigid linker arm.

Claim 293. (New) The heterodimeric dye composition of claim 292, wherein said rigid linker arm comprises one or more peptide bonds.

Claim 294. (New) The heterodimeric dye composition of claim 288, further comprising a bromine or chlorine counter-ion.

Claim 295. (New) The composition of claim 287, wherein said second dye is attached to said phenyl ring through a rigid linker arm.

Claim 296. (New) The composition of claim 295, wherein said rigid linker arm comprises one or more peptide bonds.

Claim 297. (New) The composition of claim 287, wherein said second dye is substituted in any of the *ortho*, *meta* or *para* positions of the phenyl ring.

Claim 298. (New) The composition of claim 297, wherein said second dye is substituted in the *meta* position of the phenyl ring.

Claim 299. (New) The composition of claims 287, wherein said second dye comprises a thiazole, a fluorescein, a thiazole derivative, or a fluorescein derivative.

Claim 300. (New) The composition of claim 287, further comprising a bromine or chlorine counter-ion.

Claim 301. (New) A heterodimeric dye composition having the structure

wherein said Second Dye is not a phenanthridinium moiety.

Claim 302. (New) The heterodimeric dye composition of claim 301, wherein said Second Dye is substituted in any of the *ortho*, *meta* or *para* positions of the phenyl ring.

Claim 303. (New) The heterodimeric dye composition of claim 302, wherein said Second Dye is substituted in the *meta* position of the phenyl ring.

Claim 304. (New) The heterodimeric dye composition of claims 301, wherein said second dye comprises a thiazole, a fluorescein, a thiazole derivative, or a fluorescein derivative.

Claim 305. (New) The heterodimeric dye composition of claim 301, wherein said Second Dye is attached to said structure through a rigid linker arm.

Claim 306. (New) The heterodimeric dye composition of claim 305, wherein said rigid linker arm comprises one or more peptide bonds.

Claim 307. (New) The heterodimeric dye composition of claim 306, further comprising a bromine or chlorine counter-ion.